Agenda of Google Tag Manager
Advanced with Simo Ahava

121WATT

JavaScript for Google Tag Manager

JavaScript is the beating heart of Google Tag Manager for web. GTM's mode of operation is tightly tied together with how JavaScript works in the web browser, and how the markup in your page templates is rendered by the web browser.

In fact, the more you understand about JavaScript, the easier GTM will be for you. In this part of the workshop, we'll go over some JavaScript fundamentals, which have the biggest impact on how you build your Google Tag Manager setup.

› Race conditions
› Error checking and falsy/truthy values
› Callbacks and closures

The Data Layer

Where JavaScript is the heart of GTM, Data Layer is its brain. It has many uses, ranging from a repository of semantic information to the actual triggering of GTM tags.

Here we'll run through the basics of Data Layer, keeping a focus on the technical side of things, before plunging into the murky depths of GTM's internal data model. Understanding how the data model interacts with Data Layer can really streamline your container. The data model and how it interacts with the Data Layer is instrumental in setting up things like tag sequencing and Enhanced Ecommerce.

› Data Layer walkthrough
› Interacting with the Data Layer on the website
› Google Tag Manager's internal data model

Event Tracking

Tracking events such as clicks, form submits, and history events in Google Tag Manager is one of the reasons we love the platform. However, it's not always a walk in the park. GTM relies on certain web standards and best practices in how it automates certain tracking mechanisms, and if the website utilises anything that is in conflict with these practices, then GTM will have a hard time working to its fullest potential.

Here we'll look at the actual trigger mechanism of GTM's automated event tracking, and we'll work our way through the most common issues that websites have. These include issues with jQuery event handlers, single-page apps, and with how click and link click trackers can give different results when clicking the same element.

› Quick overview of Triggers and listeners
› Detailed look at how GTM's default Triggers work
› Most common event propagation issues

Debugging Google Tag Manager

No setup is complete without a powerful debugging arsenal. In this part of the workshop, we'll go over the tools I prefer to use. The Preview mode of GTM is pretty powerful by itself, but it's definitely not complete, as it only tells you how GTM works, not how the individual tags you've fired work.

All of the tools I use are freeware and can be downloaded / installed straight away. Spoiler: the most powerful debugging tool you can use is the JavaScript console of the web browser.

› Some of the most useful tools for debugging a GTM installation
› What to consider when debugging GTM tags, triggers, and variables

Variable Variety

There are so many things you can do with variables in GTM. I wanted this part of the workshop to be a chance for everyone to share their favorite variables, and I can lead the talk with going over some of the gems in my personal variable collection.

Many of the tricks we do through GTM rely on a healthy dose of modern APIs at our disposal. Just browsing through the available HTML5 APIs should give you plenty of ideas how to utilise the features when improving the tracking capabilities of your setup.

› A show-and-tell of Simo's favorite variables
› Ideas for inspiration (e.g. HTML5 APIs, JavaScript libraries)

GTM Tools

To wrap up the talk, I want to introduce a tool I wrote a while back for GTM management. It's a web application which lets you clone, inspect, and visualise containers across your GTM accounts. It also has a handy library where you can store your favorite setups, so that you can access and clone them later to any accounts you wish.

Language:	English
Duration:	1 day
Participants:	maximum of 12
Target group:	advanced
Price:	EUR 895 (excluding VAT)
Date:	14 September, 2016
Location:	Hamburg